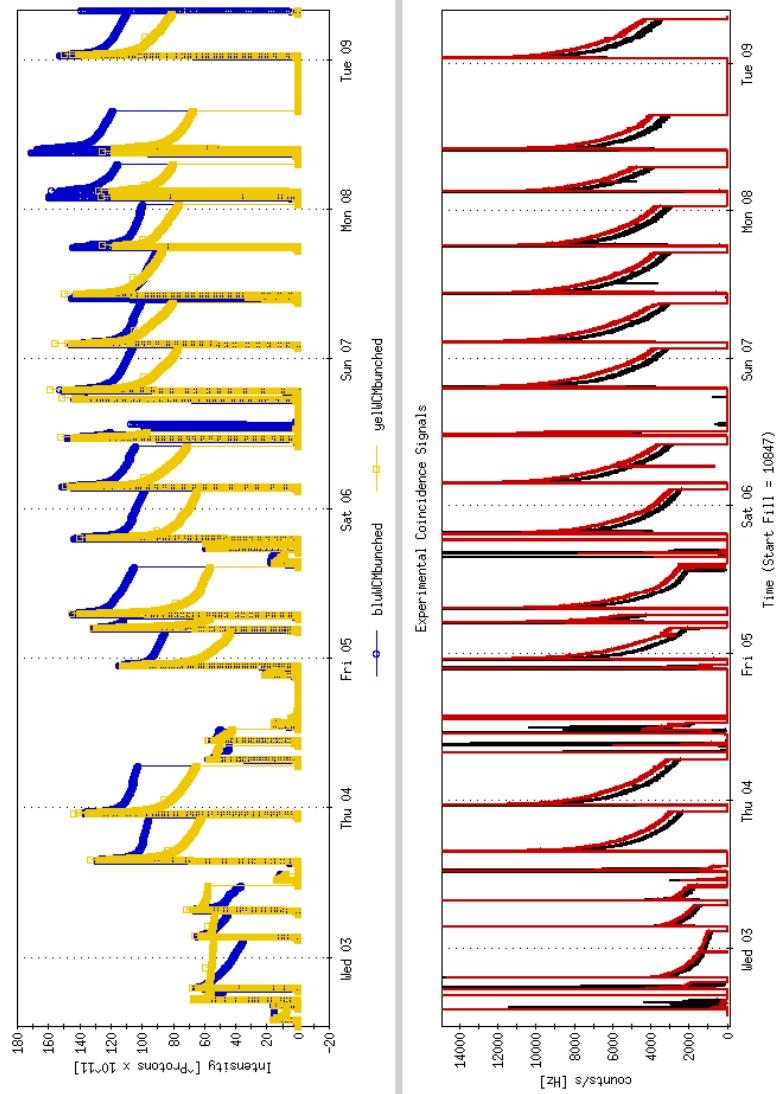


RHIC Status

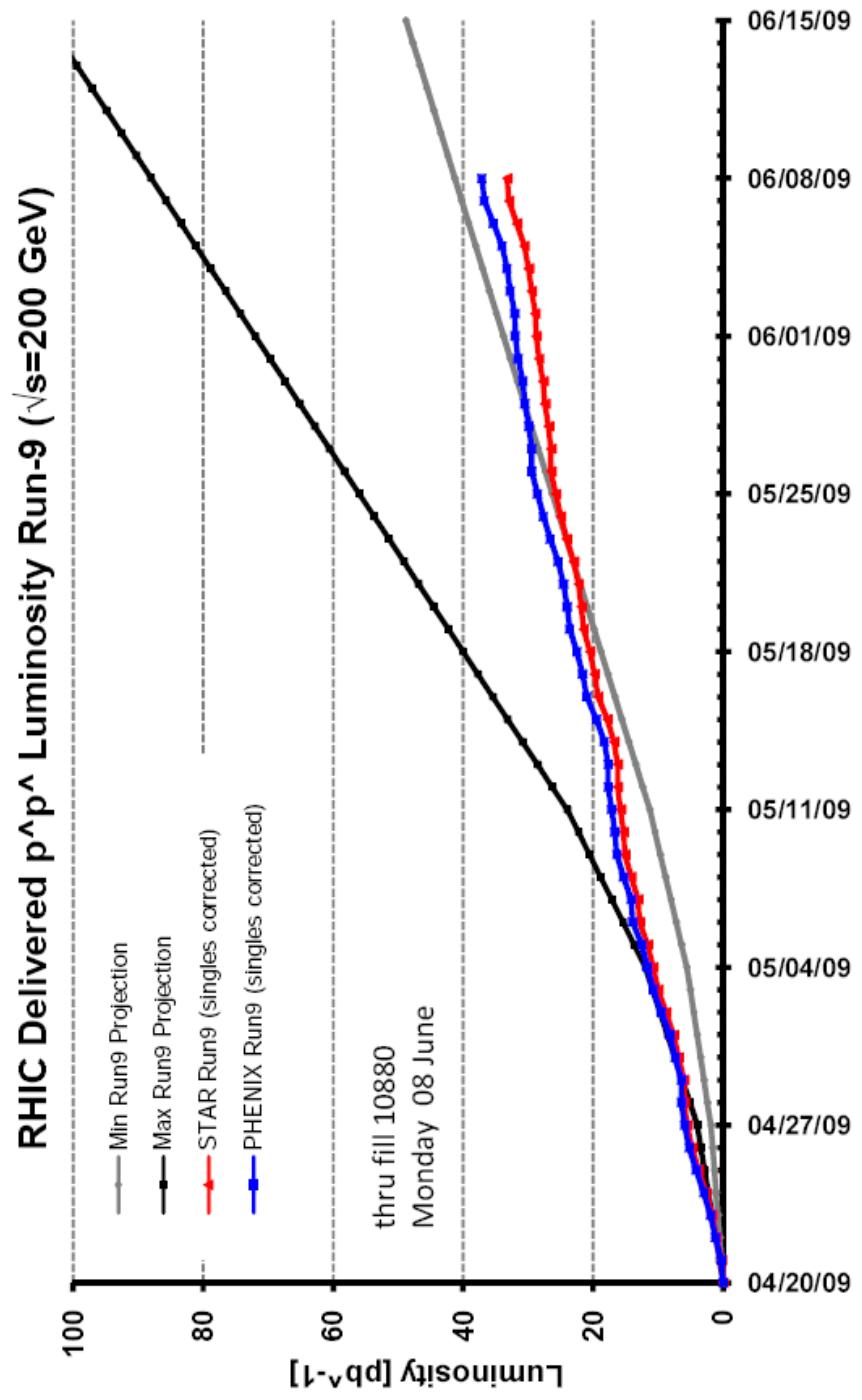
June 9, 2009



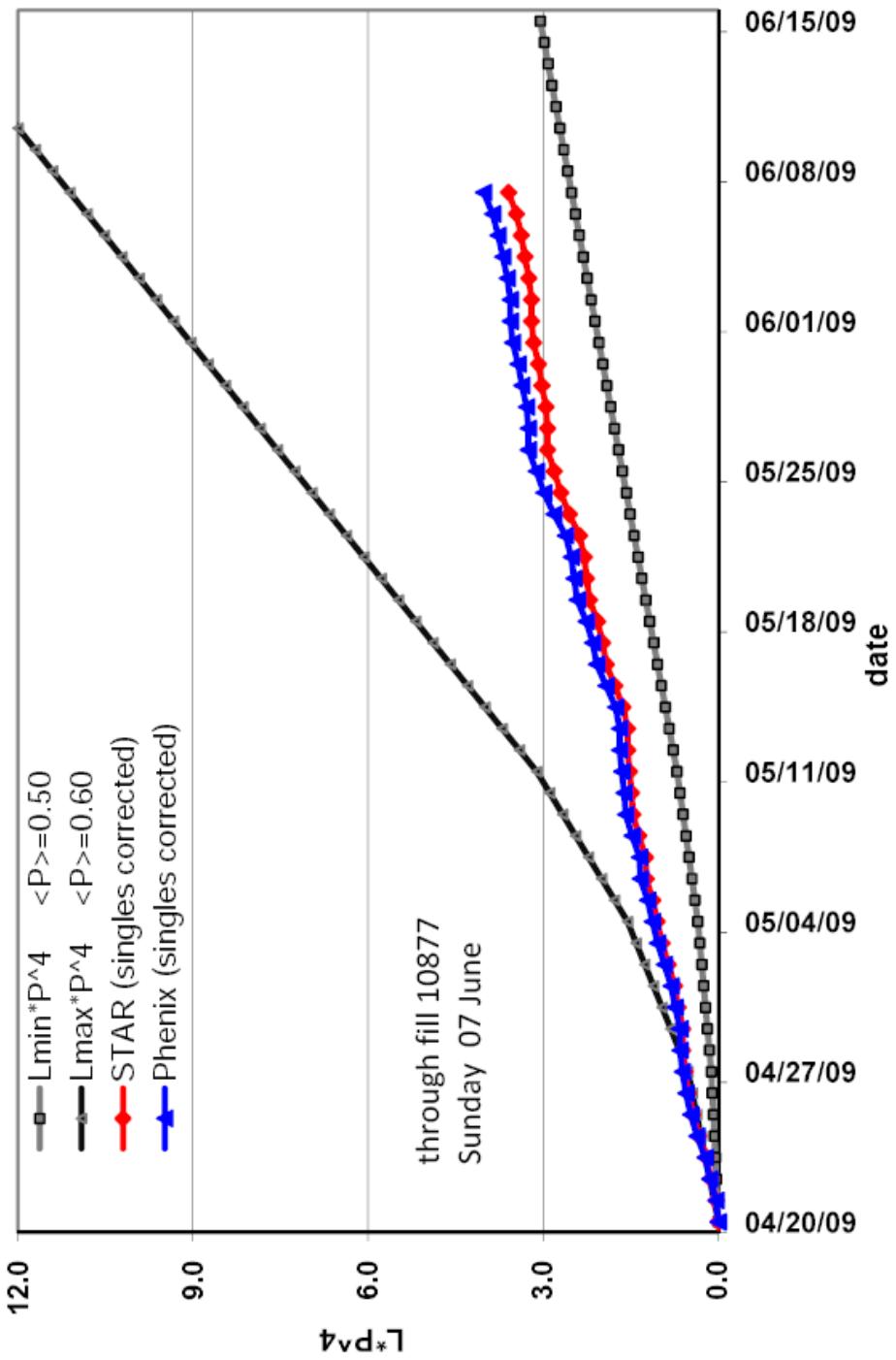
Spent significant fraction of time with Machine Development to address luminosity lifetime issue.

- Provided transverse polarization for STAR Tuesday night, using last year's $\beta^* = 1\text{ m}$ ramp
- 12 h APEX Thursday; used several hours for $\beta^* = 1\text{ m}$ store tuning. Finally, lifetime in collision is as good as last year.
 - No noise!
- Provided two stores with high bunch intensity (2e11), fewer bunches (65x65, 76x76). No luminosity gain compared to regular 109x109 stores.
- Machine development on Friday to find better working point for Blue, above .70. Lost high intensity ramp; back to physics.

- Asymmetric fills Sunday night to suppress π -mode by breaking the symmetry. No success. Back to symmetric fills.
- Pretty much exhausted our ideas on improving luminosity lifetime.
- Power dips are becoming more frequent.



**Run9 ($\sqrt{s}=200$ GeV)--STAR / PHENIX Figure of Merit
(Longitudinal Polarization)**



Plan for the week

- Physics, physics, physics...!
- Wednesday 9 – 12 AM controlled access for experiments, ramp testing for pp2pp.
- APEX Wednesday 12 – midnight, 250 GeV near-integer tune development
- Thursday 8 hours 9 MHz development
- Monday 10 hours LLRF development